

What is claimed is:

1. A method for laser welding comprising:

forming a laser-transmissible resin workpiece exhibiting
5 whitish hue of white, gray or tint color out of a resin composition
which includes 100 parts by weight of a thermoplastic resin and
0.1 to 2 parts by weight of white pigment having 2 to 2.8 of
reflectance,

piling a resin workpiece being at least partly capable of
10 laser-absorption onto the laser-transmissible resin workpiece,

and then irradiating a laser beam thereto to weld them
thermally.

2. The method for the laser welding according to claim 1,
15 wherein the resin workpiece being at least partly capable of the
laser-absorption is formed out of a resin composition which
includes 99.1 to 98 parts by weight of a thermoplastic resin and
0.1 to 2 parts by weight of white pigment having 2 to 2.8 of
reflectance, and exhibits whitish hue of white, gray or tint color.

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3. The method for the laser welding according to claim 1,
wherein the resin workpiece being at least partly capable of the
laser-absorption comprises a laser-absorptive layer including an
laser-absorbent being capable of laser-absorption under region
25 of wavelength of 800 to 1200 nm at least partially and a whitish
resin material that the layer is applied thereto.

4. The method for the laser welding according to claim 1, wherein the laser-transmissible resin workpiece has 1.5 to 1.8 of the reflectance.

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5. The method for the laser welding according to claim 3, wherein a color difference: ΔE between the laser-transmissible resin workpiece and the whitish resin material of the resin workpiece being at least partly capable of the laser-absorption is at most 0.3.

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6. The method for the laser welding according to claim 1, wherein an average particle size of the white pigment in the laser-transmissible resin workpiece is 100 to 300 nm.

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7. The method for the laser welding according to claim 3, wherein the laser-absorptive layer is prepared by applying ink and/or paint including the laser-absorbent.

20 8. The method for the laser welding according to claim 7, wherein a principal solvent in the ink and/or the paint is an alcohol solvent or a glycol solvent.

9. The method for the laser welding according to claim 3, wherein the laser-absorptive layer is a resin film including the laser-absorbent.

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10. The method for the laser welding according to claim 3, wherein the laser-absorbent is carbon black and/or nigrosine.

5 11. The method for the laser welding according to claim 1, wherein the laser beam is irradiated with scanning, and furnishes an energy quantity: x (J/mm) that satisfies the following numerical expression

$$x = \frac{p \times T}{100 \times q} \geq 0.9$$

10 [in the numerical expression, p (W) is output power of the laser beam, q (mm/sec.) is scanning speed of the laser beam, T is transmittance of the laser-transmissible resin workpiece under wavelength of the laser beam].